1854MNRAS..14..165G

BELLONA.

CAMBRIDGE.

1854.	Green. M.T.	R.A.	Par. Corr. $\times\Delta$.	N.P.D.	Par. Corr. $\times\Delta$.	No. of Comps.	Star
	h m s	h m s	s	° ′ ″	″		
March 10	10 41 4·4	11 59 29·80	−0·183	81 34 50·0	−6·02	8	*c*
11	10 13 32·2	11 58 46·88	−0·213	81 25 44·9	−6·05	9	*c′*
13	12 31 37·3	11 57 13·51		81 6 51·8	−5·85	Meridian.	
16	12 17 34·9	11 54 58·49		80 40 11·8	−5·80	—	

Assumed Apparent Places of the Star.

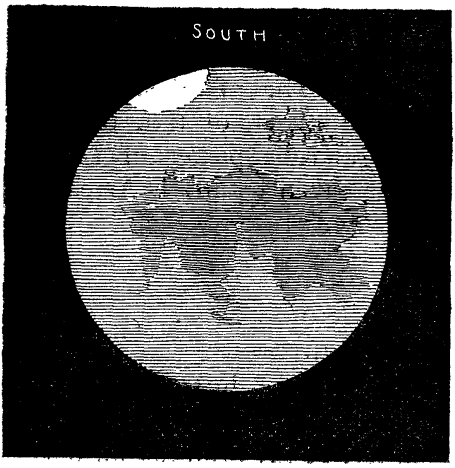
	Apparent R.A.	Apparent N.P.D.	Catalogue.
	h m s	° ′ ″	
c	11 56 50·95	81 47 15·3	Bessel xi. 973
c′	11 56 50·96	81 47 15·4	—

The equatoreal observations were taken with the Northumberland telescope.

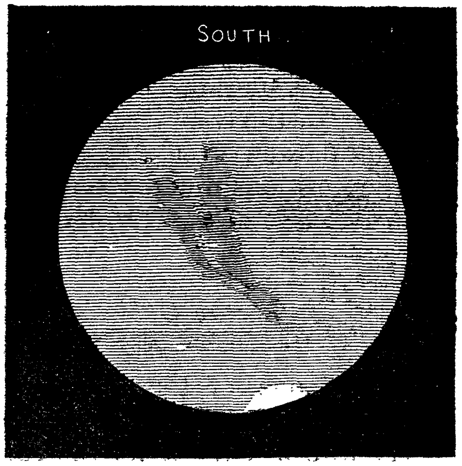
On the Influence of Climate upon the Telescopic Appearance of a Celestial Body. By James William Grant, Esq.

(*Extract of a Letter to the Editor.*)

"I send you two sketches of *Mars*, made whilst the planet was in opposition. No. 1 was an attempt made in October 1847 to depict it as seen in Calcutta through a 5-foot achromatic belonging to me, the planet being then in opposition; No. 2 I tried my hand upon a few days ago, and it shows what I saw through the large telescope.* The atmosphere in India is very different for observation to anything I have seen here. My Indian sketch, you will observe, is actually a little world; and I doubt whether the large glass here would show it equally well, even were the weather favourable, which, I am sorry to say, hitherto it has not been.



1



2

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* The telescope to which Mr. Grant refers is a refractor of 11 inches aperture and 16 feet focal length, by Mr. Ross, of Featherstone Buildings. It is the instrument which formed such a conspicuous object in the nave of the Crystal Palace during the Great Exhibition of 1851.

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There is a very fine 5-foot achromatic, mounted as a finder, to my large instrument; and I tried it on *Mars*, with the same power I used when taking the Calcutta sketch; but it was very poor. I send you these particulars, that you may mention them to those who have to decide upon getting up a large instrument for a finer climate than England, as I think that different climates should be tried before the position is finally fixed upon.

" *Wester Elchies, March* 14, 1854."

Extract of a Letter from Professor Colla to Mr. Hind, dated Dec. 5, 1853.

" I have the satisfaction of informing you that on the morning of the 29th of November, I found the comet of Bruhns after its passage of the perihelion, above the star ϑ of *Serpentarius*. I employed in searching for it a refractor by Lerebours, of 4 inches aperture, with a magnifying power of 60, but it was only with the greatest difficulty that I succeeded in seizing it; for it is extremely faint, without nucleus, without trace of tail, exhibiting only, even with a magnifying power of 100, a very minute nebulosity of uniform brightness, with a feeble appearance of scintillation by intervals.

" I observed it again about 6 o'clock on the morning of the 30th of November, but even with greater difficulty, for it appeared very close to a bright telescopic star which rendered it almost insensible.

" At $5^h\,45^m$ on the morning of December 3, the sky being very clear, I found the comet again with facility. The nebulosity was more distinct, but there was no trace of nucleus, of tail, or of scintillation, even when employing a magnifying power of 100. The positions differed very little from those given by M. D'Arrest, in No. 880 of the *Astronomische Nachrichten*."

On the Orbit of the Eighth Satellite of Saturn.

By Warren De La Rue, Esq.

At one of the meetings of the Society held last year Mr. De La Rue exhibited a diagram of the apparent orbit of the eighth satellite of *Saturn* for the 16th of November, 1852, founded on his own micrometrical measurements, and those of Mr. Lassell at Malta. By a graphic process he obtained the following rough approximation to the elements of the true orbit of the satellite :—

Mean longitude on orbit, Nov. 16, 1852 ...	265°	
Semi-major axis at mean distance...........	514″·7	
Eccentricity..	0·025	
Longitude of Perisaturnum	130°	M. Equinox, 1852·0
Longitude of ascending node	141° 20′	
Inclination to the ecliptic	18° 30′	
Sidereal revolution	$79^d\,9^h\,13^m\,12^s$	

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